SOUND CURTAIN SYSTEMS

IN-PLANT NOISE CONTROL APPLICATIONS:

dB Engineering’s sound curtain systems offer significant noise reduction with high STC AND NRC acoustical ratings. They can be supplied as a partial or complete enclosure around noisy industrial equipment including:

COMPRESSORS, PUMPS, GENERATORS, BLOWERS, FANS, GRANULATORS, AND PRESSES

Also suitable for larger complete enclosures including:

MANUFACTURING EQUIPMENT, TEST CHAMBERS, AND MACHINERY ENCLOSURES
Features of dB Engineering Sound Curtain Systems

In addition to very effective, high-performance sound curtain panels, a successful functional acoustical enclosure often requires a wide array of features and options allowing for equipment access, visibility and ventilation.

Modular panels join together to form any configuration required:
- 2 Sided partial enclosures
- 3 Sided partial enclosures
- 4 Sided full enclosures
- 4 Sided full enclosures with roof

- Framing systems are available for floor mount, wall mount, ceiling mount or suspended by threaded rod.
- A variety of framing systems are available including a heavy structural steel frame system for large enclosures.
- Double track systems; available for slide by access. Every panel can be a door.
- Durable construction for long service life in even severe industrial conditions.

- Rigid roof panels are available for maximum noise reduction.
- Clear vinyl windows are available for visibility and can be sewn on or removable.
  - Side air intake vent baffles allow air into the enclosure without compromising acoustical performance.
  - Roof top vent baffles made from rugged sheet metals are lined with sound absorption material.
  - Curtain panels can be field cut to work around obstacles.
  - Easy to install, relocate or modify.

- CAD drawings provided with every order.
- Short lead time even for custom enclosures and expedites available if needed even faster.
- Economical alternative to rigid metal acoustical enclosures.

Can be used as partition dividers, noise barrier walls, hood, or shroud covers.
“BBC” STYLE (BARRIER BACKED COMBINATION):
- Modular acoustical curtain panels feature grommets at top and Velcro fasteners along each edge.
- Sound absorptive quilted fiberglass on one side of reinforced mass loaded barrier material.
- Reinforced barrier back offers excellent durability and abuse resistance.
- Utilized as fixed panels and sliding doors on acoustical curtain enclosures.
- Suitable for outdoor applications.
- Custom fabricated for “acoustical jackets” on blowers, fans or compressor housings.
- Also available in bound or unbound rolls.
- STC ratings up to 37, NRC ratings up to 1.05.
- Class A flammability rating (per ASTM E-84).

“BSC” STYLE (BARRIER SEPTUM COMBINATION):
- Sound absorptive faced quilted fiberglass (gray, white, tan or black) on both sides of loaded vinyl noise barrier material.
- Modular acoustical curtain panels feature grommets at top and Velcro fasteners along each edge.
- Utilized as perimeter walls, separator walls, or divider partitions between noise sources.
- Utilized as absorber/barrier composite liner in enclosures, rooms or buildings.
- Outer layer of quilted fiberglass adds additional sound absorption to environment.
- Also available in bound or unbound rolls.
- STC ratings up to 33, NRC ratings up to .85.
- Class A flammability rating (per ASTM E-84).
ACOUSTICAL DATA:
The most effective noise reduction products combine both sound absorption and noise barrier properties. Tested under strict compliance to appropriate ASTM standards, we offer the following results:

<table>
<thead>
<tr>
<th>Sound Transmission Loss (dB) per Octave Band Frequency</th>
<th>THK.</th>
<th>WT.</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>STC</th>
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</thead>
<tbody>
<tr>
<td>BBC-13-2”</td>
<td>2”</td>
<td>1.5</td>
<td>13</td>
<td>20</td>
<td>29</td>
<td>40</td>
<td>50</td>
<td>55</td>
<td>32</td>
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<tr>
<td>BBC-13</td>
<td>1”</td>
<td>1.3</td>
<td>11</td>
<td>16</td>
<td>24</td>
<td>30</td>
<td>35</td>
<td>35</td>
<td>27</td>
</tr>
<tr>
<td>BBC-13-2 LB-2”</td>
<td>2.5”</td>
<td>2</td>
<td>19</td>
<td>25</td>
<td>33</td>
<td>46</td>
<td>53</td>
<td>58</td>
<td>37</td>
</tr>
<tr>
<td>BSC-25</td>
<td>2”</td>
<td>1.5</td>
<td>12</td>
<td>16</td>
<td>27</td>
<td>40</td>
<td>44</td>
<td>43</td>
<td>29</td>
</tr>
<tr>
<td>BSC-25-2 LB</td>
<td>2”</td>
<td>2.5</td>
<td>19</td>
<td>22</td>
<td>28</td>
<td>40</td>
<td>56</td>
<td>61</td>
<td>33</td>
</tr>
<tr>
<td>BB-RP Roof Panel</td>
<td>2”</td>
<td>2</td>
<td>18</td>
<td>24</td>
<td>28</td>
<td>37</td>
<td>45</td>
<td>46</td>
<td>31</td>
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</table>

Per ASTM E 90

<table>
<thead>
<tr>
<th>Flammability Ratings</th>
<th>Product Descriptor</th>
<th>Flame Spread</th>
<th>Smoke Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC-25</td>
<td>Vinyl faced 1” quilted fiberglass on both sides of a 1 lb. PSF non-reinforced loaded vinyl barrier septum</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td>BSC-26</td>
<td>Silicone faced 1” quilted fiberglass on both sides of a 1 lb. PSF non-reinforced noise barrier septum</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>BSC-24</td>
<td>Scrim faced 1” quilted fiberglass on both side of a 1 lb. PSF non-reinforced noise barrier septum</td>
<td>5</td>
<td>1</td>
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<tr>
<td>BBC-13-2”</td>
<td>Vinyl faced 2” quilt on one side of a 1 lb. reinforced loaded vinyl noise barrier</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>BBC-13</td>
<td>Vinyl faced 1” quilt on one side of a 1 lb. reinforced loaded vinyl noise barrier</td>
<td>23</td>
<td>30</td>
</tr>
</tbody>
</table>

Above table shows flame spread and smoke developed ratings per ASTM Designation E84; Surface Burning Characteristics of Building Materials.

Note: Class A rating applies to products with a flame spread index of 25 or less, and a smoke developed index of 450 or less.

Additional products tested to ASTM E 162 and ASTM E 662, test reports available on request.